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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,837	12/29/2003	Christine Baumeister	886-131us	2773

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EXAMINER
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NGUYEN, KHAI N

ART UNIT	PAPER NUMBER
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2614

MAIL DATE	DELIVERY MODE
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05/13/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/748,837	<b>Applicant(s)</b> BAUMEISTER ET AL.	
	<b>Examiner</b> KHAI N. NGUYEN	<b>Art Unit</b> 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-16,18-25,27-34 and 36-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-16,18-25,27-34 and 36-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/26/2009</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 26, 2009 has been entered.

### ***Response to Amendment***

2. Applicant's amendment filed on February 26, 2009 has been entered. Claims **1**, **2**, **4-9**, **18-19**, **23**, **24**, **25**, and **27-31** have been amended. Claims **3**, **17**, **26**, and **35** have been canceled. No claims have been added. Claims **1-2**, **4-16**, **18-25**, **27-34**, and **36-38** are still pending in this application, with claims **1**, **9**, **23**, **24**, and **31** being independent.

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Rejections - 35 USC § 103***

4. Claims **1-2**, **4-16**, **18-25**, **27-34**, and **36-38** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ryan et al. (U.S. Patent Number 6,744,858 hereinafter

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"Ryan") in view of Shtivelman (U.S. Publication Number 2002/0054670 A1) in view of Foladare et al. (U.S. Patent Number 5,978,671 hereinafter "Foladare").

Regarding claims 1, 9, 23, 24 and 31, Ryan teaches a method and a call routing system for use in directory assistance, said routing system (Figs. 1-4) comprising:

a primary call routing device (Fig. 3, 60 Primary) at a first call center (Figs. 2-3, 30, 32) in the directory assistance system configured to receive directory assistance calls from callers among a plurality of call centers (Figs. 1-3, 30s) (Figs. 1-4, column 4, lines 59-60, i.e., received a call through a router at the call center);

a secondary router (Fig. 2, 65 Backup) at said first call center (Figs. 2-3, 30, 32) in said directory assistance system, said secondary router configured to initially route said calls within said first call center to said primary call routing device, and wherein if said primary call routing device is off-line, said secondary call router employs a default call distribution logic to route said calls among said first call center and said plurality of call centers (Fig. 1-3, 30s) in said directory assistance systems (Figs. 1-4, column 5, lines 31-32, i.e., both primary and backup have the capacity to serve multiple call centers reads on "if the primary call routing device is off-line, the second call routing device "backup" employs a default call distribution logic to route said calls among said first call center and said plurality of call centers", and lines 59-61, i.e., if one out of service "off-line" for some reasons, the other one could pick up the load and continue on).

However, Ryan does not specifically disclose to determine whether said calls will be handled by said first call center or by a second call center, a frequent caller database, configured to store information corresponding to frequent callers, a frequent caller routing module attempts to designate a desired predefined percentage of calls of the total numbers of calls to said directory assistance system as priority calls. Although, Ryan teaches the workload can be distributed among the primary and the backup (column 5, line 64).

In the same field of endeavor, Shtivelman teaches to determine, for each of said calls, whether said calls will be handled by said first directory assistance system (See Shtivelman - Fig. 1, 15 Call Center), or by a second directory assistance system (See Shtivelman - Fig. 1, 13 Call Center) (See Shtivelman - Fig.1, paragraph hereinafter "par" [0031] lines 3-8, i.e., calls are routed according to programmable rules), a frequent caller routing module (See Shtivelman - Fig. 1, 21 IVR, Fig. 2, 113 CTI Processor, 115 IVR) coupled to said primary call routing device (See Shtivelman - Fig. 147 Processor, 51 Switch, Fig. 2, 103 Switching Apparatus) and attempts to designate a desired predefined percentage of calls (See Shtivelman - Figs. 1-3, Fig. 3, step 87 Determine if caller has priority, par [0046], and par [0053], i.e., determine if caller has priority reads on frequent caller routing, and Fig. 1, 15, 16, 19, 21, par [0038], i.e., selection of a percentage of callers for diversion, and par [0040]). Shtivelman further teaches that there is a need for diverting calls and routed by priority (See Shtivelman - par [0013]).

And, Foladare teaches a method and a system to provide frequent call routing by detecting repeat or frequent caller and accessing/updating a frequent caller database

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(See Foladare – Figs. 1-2, column 2, lines 27-48). Foladare further teaches that there is an advantage to use speech recognition technique (e.g., IVR) to obtain caller information for querying the caller database (see Foladare - column 2, lines 58-66).

Therefore, it would have been obvious to a person of ordinary in the art at the time of the invention was made to incorporate the technique to handle the calls, a frequent caller module and database, as taught by Shtivelman and Foladare above, into the method and system of Ryan in order to enhance the call routing services in a plurality of call centers. Since, Ryan teaches the system and method for supporting multiple call centers, and thus adding the technique to handle the calls, a frequent caller module and database as taught by Shtivelman and Foladare is to apply a known technique to a known device ready for improvement to yield predictable results (see KSR – MPEP 2143). One having ordinary skill in the art would have been motivated to make such a modification to divert the calls, routed by priority, and uses IVR to obtain information from the database, as per the teachings of Shtivelman and Foladare.

Regarding claims 2 and 25, Ryan teaches a method and a call routing system, wherein said secondary router is configured to determine the online/off-line status of said primary call routing device (Figs. 1-4, column 5, lines 31-32, and lines 59-60, i.e., one out of service, the other one could pick up the load and continue on).

Regarding claims 4 and 27-29, Ryan teaches a method and a call routing system, further comprising a transfer router (Fig. 2, 98), said transfer router configured

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to transfer calls between said first call center (Fig. 2, 30) and a second call center in said directory assistance system (Fig. 2, 30s) via a Wide Area Network (WAN), the Internet, and/or a packet switched network (Figs. 1-4, 25 WAN/TCP/IP Network, 30 Call Centers, 98 Router, column 2, lines 15-19, and column 4, lines 54-58, i.e., router takes VoIP and put it onto a WAN or Intranet to make the connection to the appropriate call center).

Regarding claims 5-6 and 30, Ryan discloses everything claimed as applied above (see claims 1, 4, and 24 above). Shtivelman teaches a method and a call routing system, wherein said primary call routing device routes a portion of said plurality of said incoming calls to said second call center when said first call center in said directory assistance system is experiencing high call volume and/or offline (Figs 1-2, par [0048], i.e., calls are diverted when call volume is exceeded a preset threshold "offline", and par [0050]).

Regarding claims 7-8, Ryan discloses everything claimed as applied above (see claims 1 and 4 above). And, Shtivelman teaches a call routing system, further comprising an automatic call distribution call center, configured to receive a portion of said is plurality of calls from said secondary router and distribute them among a plurality of operator terminals disposed within said first call center in said directory assistance system, and where in said second call center in said directory assistance system further comprises a second automatic call distribution call center configured to receive a portion

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of said plurality of calls from said secondary router and distribute them among a plurality of operator terminals disposed within said second call center (Fig. 1, par [0050], i.e., call center 13, call center 15 and other call centers may only have a certain percentage of incoming calls).

Regarding claims 10-11, Ryan discloses everything claimed as applied above (see claim 9 above). Shtivelman teaches the call routing system (Figs. 1-3), wherein said frequent call routing module is located within said primary call routing device, and wherein said frequent call routing module is a software application within said primary call routing device (Figs. 1-3, par [0059] lines 5-8).

Regarding claims 12-16 and 32-34, Ryan discloses everything claimed as applied above (see claims 9 and 31 above). Shtivelman teaches the call routing system (Fig. 1), wherein said frequent call routing module is configured to convey the priority call routing decision to said primary call routing device to perform routing of said call, wherein said information corresponding to frequent callers includes a listing of frequent callers to said directory assistance system and the corresponding frequency of their calls (Figs. 1-3, par [0013], and par [0031] lines 9-14), wherein said frequency of calls made to said directory assistance system are stored as calls per month, wherein said information corresponding to frequent callers includes a listing of frequent callers to said directory assistance system are stored in one of a plurality of designated call frequency groups, and wherein said frequent caller routing module makes priority routing decisions



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for incoming calls based on said call frequency group assigned to said caller, in the caller database (Figs. 1-2, par [0034], and par [0040], i.e., call frequency groups such as emergency workers, certain authorities).

And Foladare teaches a frequent caller database (see Foladare – Figs. 1-2, column 2, lines 27-48) and store the frequency of calls made (see Foladare – Figs. 1-2, column 6, lines 41-44, i.e., number of times a caller has called is maintained in the database).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide Ryan with the above teachings from Shtivelman and Foladare.

Regarding claims 18-19 and 36, Ryan discloses everything claimed as applied above (see claims 9 and 31 above). Shtivelman teaches the call routing system, wherein said desired percentage of calls is 3-5% of the total call volume to said directory assistance, and wherein said frequent caller routing module dynamically adjusts priority routing decisions for incoming calls by changing said call frequency groups that are designated for priority routing so as to maintain said predefined percentage of calls of the total numbers of calls to said directory assistance system, routed as priority calls (Fig. 1, 15, 16, 19, 21, par [0038], i.e., selection of a percentage of callers for diversion, and par [0040]).

Regarding claims 20-22 and 37-38, Ryan discloses everything claimed as applied above (see claims 9 and 31 above). Shtivelman teaches the call routing system, wherein said priority call routing includes expediting the handling of said call within said directory assistance system (Fig. 1, 16, 19, 21, par [0042] lines 5-6, i.e., callers have correct code/password would be immediately routed), wherein said priority call routing includes routing said call within said directory assistance system to a particular operator terminal among a plurality of operator terminals, and wherein said particular operator terminal is an increased skill operator (par [0042] lines 12-15, i.e., routed to appropriate services).

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1-38 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHAI N. NGUYEN whose telephone number is (571)270-3141. The examiner can normally be reached on Monday - Thursday 6:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad F. Matar can be reached on (571) 272-7488. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K. N. N./  
Examiner, Art Unit 2614

/Ahmad F Matar/  
Supervisory Patent Examiner, Art Unit 2614